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7/26/79

ENVIRONMENTAL ASSESSMENT

for

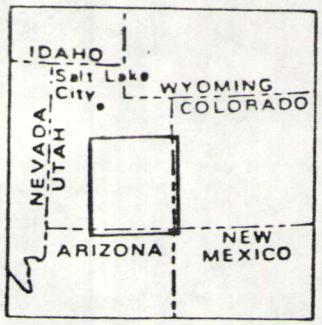
Plateau Resources Ltd.

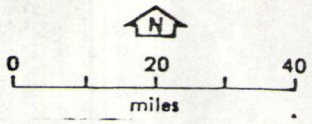
Frank M. Uranium Mine
ACT/017/017
Sections 1, 2, 3 & 12
Township 35 South, Range 11 East
Garfield County, Utah

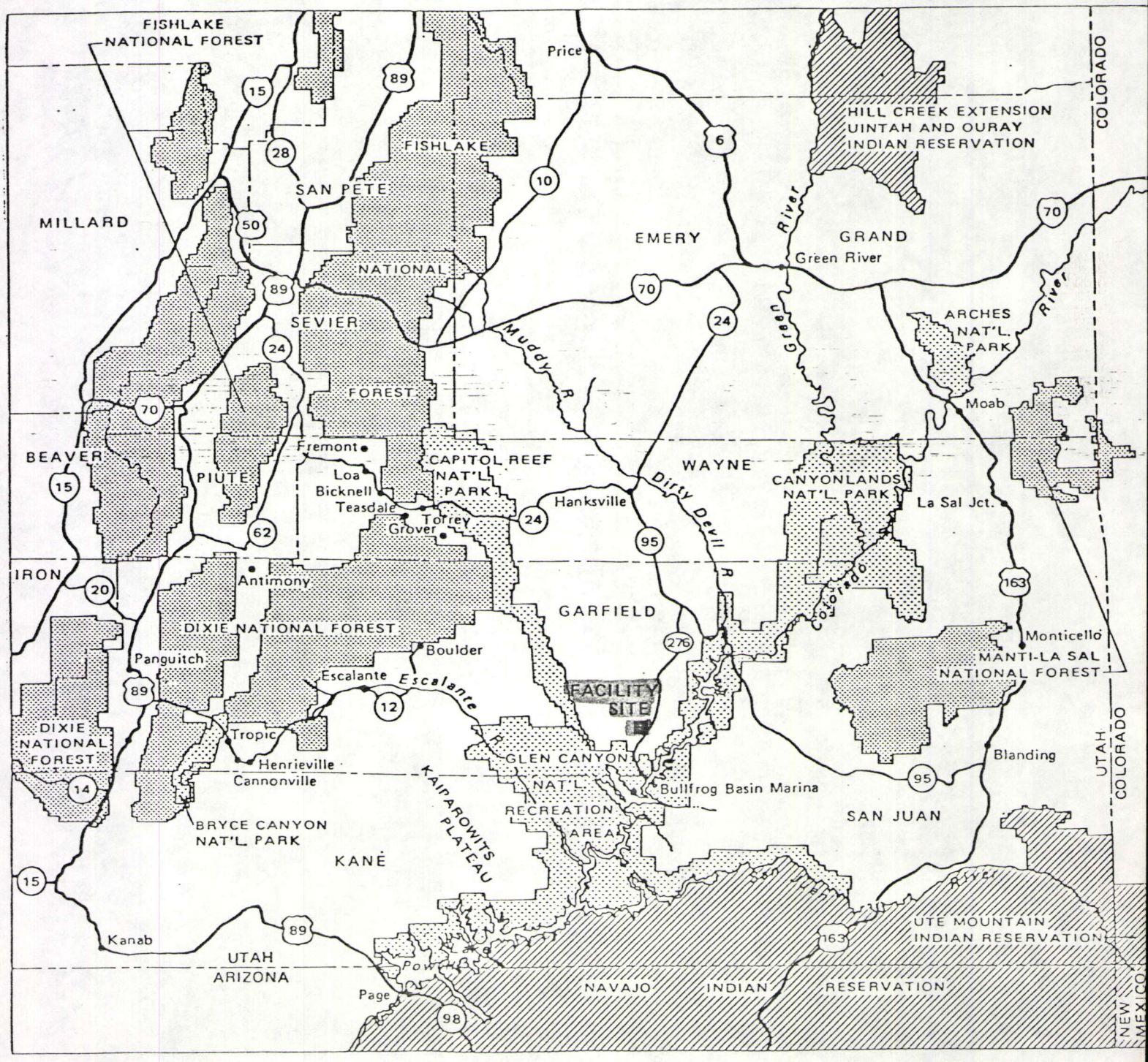
July 5, 1979

Prepared by: Utah Division of Oil, Gas and Mining
Mary Ann Wright, Reclamation Biologist

Mine Name: Frank M. Uranium Mine
Location: Sections 1, 2, 3 & 12, Township 35 South, Range 11 East
County: Garifield







I. LOCATION OF PROPOSED ACTION:

Plateau Resources Ltd., 772 Horizon Drive, Grand Junction, Colorado 81501, proposes to establish an underground uranium mine in southeastern Garfield County. The legal description of the proposed action is Sections 1, 2, 3 and 12, Township 35 South, Range 11 East. This location is 55 miles south of Hanksville and 15 miles north of Bullfrog Basin via State Route 276 in Shootering Canyon.

The area to be affected constitutes Utah State Lease #32305, Section 2, and public domain on Sections 1, 3, and 12. The source of the operator's right to enter and conduct operations is by unpatented mining claims and the Utah State lease.

The proposed mine is named the Frank M. Mine.

The proposed Frank M. Mine is connected to three other projects of note in this area. Plateau Resources is the developer of the adjacent Shootering Canyon Uranium Processing Plant and the community of Ticaboo. A pre-existing mine, which has been given tentative approval by the Division of Oil, Gas and Mining also exists near these two other sites.

II. DESCRIPTION OF PROPOSED ACTION:

Plateau Resources by exploratory drilling has outlined the extent of the ore body. The ore body to be mined extends through Sections 2 and 3.

The proposed road will travel westward from Highway 276 through Sections 1, 12 and 2. The existing road into the area from the highway passes through a drainage for a distance and is thus not suitable for permanent access.

The mining method to be employed is the driving of horizontal drifts with the development of lateral stopes. An incline portal will be utilized to enter the mine. The life of the mine is expected to be 15 years.

The site facilities for this operation will occupy approximately 7 acres. The mining facilities will consist of the incline portal and 3 ore bins. The buildings at the site will include a changehouse for the miners, a shop, a warehouse and two trailers for office space. A storage yard and parking area will also be part of the mine yard area. Compressor units, a generator and a water well comprises the larger and more permanent equipment which will be on site during the mine life.

Approximately 1.5 acres will be utilized for the stockpiling of topsoil from the disturbed areas. The waste disposal site may occupy up to 40 acres in a canyon area adjacent to the surface facilities. The waste disposal area was chosen for its ability to meet the proposed E.P.A. standards on flooding of

hazardous waste disposal areas. The proposed waste disposal area also has been approved by Division of Oil, Gas and Mining personnel. The watershed for the proposed waste dump area is very small and thus it was determined that this fill area will cause little to no problem concerning surface hydrology.

Plateau Resources has committed that mining and maintenance methods will be carried out in a safe and orderly manner.

III. DESCRIPTION OF THE EXISTING ENVIRONMENT:

A. Geology

The mining site is located within the Henry Mountains Basin and is characterized by buttes, mesas and canyons. The buttes and mesas in this area are capped by the Salt Wash Member of the Morrison Formation. This sandstone unit contains the uranium deposits which are mined in the area. The site elevation is approximately 5,000 feet above sea level.

B. Climate

The climate in the site vicinity is semiarid. The area is typified by abundant clear days, low precipitation (about 7 - 9 inches annually), low humidity and a high evaporation potential. Summer temperatures exceed 100° F and winter temperatures are often below freezing.

C. Soils

Soils in the area are generally low in organic matter and range in texture from sand to loamy-fine sand. Sandstone rock outcropping occurs frequently throughout the proposed mine site area. Depth of the soils ranges from 0 to 18 inches.

D. Hydrology

Surface waters in the vicinity of the site consist of Shootering and Hansen Creeks which are ephemeral streams. These streams have been categorized as Class C waters which means that without treatment these waters are suitable for irrigation, stock watering, recreation and the propagation and perpetuation of fish and wildlife. Baseline water quality sampling has been done by the U.S. Nuclear Regulatory Commission for the Environmental Statement related to the proposed uranium processing facility at the site. It is presumed that surface drainage at the site will not be affected.

Groundwater at the site is important for its potential source of water supply. The Entrada and Navajo sandstones contain the primary area of aquifers in the area and several springs exist in the vicinity. The area of mining is dry, however, and it is not expected that groundwater will be encountered.

E. Ecology

Studies of the ecology of this area were conducted in 1977 for the Environmental Report for the proposed uranium processing facility. Vegetative plant cover varies between 15 and 25% and is dominated by blackbrush and Mormon tea. Juniper, winterfat, fourwing saltbush, snakeweed and sagebrush are common to the site. Herbaceous species are predominantely of the pea, mustard and buckwheat families.

Wildlife diversity of the area is comparatively low. The area has been ranked by Utah Division of Wildlife Resources as being of "Limited Value" to big game animals.

Due to a requirement by the U.S. Fish & Wildlife Service, a survey for endangered flora and fauna was conducted for the area of the proposed mill site in June, 1979. The findings of the survey were that none of the endangered or threatened plant species, which were suggested may be found in the area, were observed. Furthermore, essential habitat necessary to support any of the endangered or threatened species does not occur in the area. Additionally, no peregrine falcons or bald eagles or critical habitat for either species were found in the area.

F. Archeology

An archeological survey of the proposed mine site was conducted by a private consultant during the week of July 9, 1979. The survey area included the proposed areas for the surface facilities, the waste dump and the access road.

G. Socioeconomic

The proposed mine site lies in a sparsely populated corner of Garfield County. Workers at the existing mine, Lucky Strike/Tony M. Mine, presently reside in a temporary 40-trailer camp within the Shootering Canyon. Trailers will begin moving to Ticaboo this August. Ten miles to the south of the proposed site in Kane County is the high-use recreation facility of Bullfrog Marina located on Lake Powell. A low number of permanent personnel reside year round at this site. School children at the mine camp presently utilize facilities at the Bullfrog Marina. The town of Ticaboo is scheduled for its first phase of completion in the spring of 1981. Complete facilities including school and medical are planned for the site.

IV. IMPACTS:

A. Geology

Surface topography will be altered slightly over the approximately seven (7) acres planned for surface facilities. The 40 acre waste dump area will obliterate a small canyon at the site.

B. Climate

The clear air quality will be impacted temporarily during construction phases.

C. Soils

Soil encountered will be removed prior to the placement of surface facilities.

D. Hydrology

No impact to the surface or ground waters is anticipated.

E. Ecology

Vegetation and wildlife habitat will be destroyed over an estimated 65 acres during the mine life of 15 years.

F. Archeology

It is not anticipated that any archeological sites will be found at the site. If any sites are discovered proper arrangements will be made to avoid or to salvage the artifacts.

G. Socioeconomic

A rapid expansion in population is planned for the area due to the development of the mine, the mill, and the town of Ticaboo.

V. ALTERNATIVES TO THE PROPOSED ACTION:

A. No Action - Recommend that the ore body not be mined. This alternative would restrict the supply of ore to the proposed mill.

B. Allow Mining with Specific Constraints

This alternative would provide for development of the deposit along with the use of mitigative tactics to reduce impacts to the area.

VI. MITIGATIVE MEASURES TO BE UTILIZED:

A. Topography

1. Surficial material (soil) will be segregated, stockpiled, and regraded at the end of the mine life over the affected area in harmony with the local contour.

2. The waste dump area will be graded and prepared for final reclamation.

B. Vegetation

1. All affected areas will be revegetated to the level of 70% of the original ground cover as required by the Utah Mined Land Reclamation Act of 1975. The sites will be checked at least biannually by Plateau Resources personnel who will immediately augment any necessary steps in revegetation or erosion control.

2. Species and amounts of seed to be used in revegetation will be determined by test plots conducted on stockpiled soil and waste dump areas.

C. Hydrology

Erosion from surface drainage of disturbed areas will be checked by achievement of natural contours and revegetation as outlined above.

D. Other

1. Portal and ventilation shafts will be sealed to prevent unauthorized or accidental entry at the end of the mine life.

2. Extraneous debris, unusable buildings, and scrap metal and wood will be removed from the location or buried at the end of the mine life.

3. A reclamation performance surety in the form of a contract is being negotiated between the Division of Oil, Gas and Mining and Plateau Resources Ltd.